

### AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A safety bus system, comprising:

~~at least one bus-capable module~~ a plurality of first bus-capable modules, each being connected to at least one sensor and at least one actuator, said sensor configured to sense operational characteristics of a respective machine component in an operating machine and said actuator configured to actuate said respective machine component;

at least one second bus-capable module connected to at least one safety function;

at least one bus controller configured to control the respective machine components via the corresponding first bus-capable modules; and

at least one bus line interconnecting the ~~at least one first and second bus-capable module~~ modules and the at least one bus controller,

~~wherein at least one safety function can be implemented by the safety bus system, and the at least one safety function may be performed essentially simultaneously with at least one control function and/or at least one measurement function~~

wherein when the safety function is selected, the bus-controller variably controls the respective machine components based on the sensed operational characteristics and a type of the safety function such that a number of various flexible safety concepts are applied the operating machine.

2. (Currently Amended) The safety bus system of claim 1, wherein ~~at least one analog signal may be processed by means of the at least one safety function and/or the at least one~~

~~control function and/or the at least one measurement function~~ signals on the bus line are analog signals.

3. (Currently Amended) The safety bus system of claim 1, wherein ~~at least one digital signal may be processed by means of the at least one safety function and/or the at least one control function and/or the at least one measurement functions~~ signals on the bus line are digital signals.

4. (Currently Amended) The safety bus system of claim 1, wherein ~~at least one of the at least one safety functions~~ the safety function is at least one from a safety window, an enclosure switch, or an emergency stop function.

5. (Currently Amended) The safety bus system of claim 1, wherein ~~at least one of the at least one bus-capable modules includes at least one actuator and/or at least one sensor and/or at least one display~~ the first and second bus-capable modules further comprise a display configured to display information to an operator.

6. (Canceled).

7. (Currently Amended) The safety bus system of claim ~~6~~1, wherein the ~~at least one commanding means~~ safety function is a switch, a button, or emergency off switch, ~~or sensor.~~

8. (Currently Amended) The safety bus system of claim 1, wherein at least one ~~of the at least one bus-capable modules includes at least one signaling means~~from the first and second bus-capable modules further includes at least one signaling mechanism.

9. (Currently Amended) The safety bus system of claim 8, wherein the at least one signaling means ~~produces at least one optical signal and/or at least one acoustic signal and/or at least one mechanical signal~~mechanism produces an optical, acoustic or mechanical signal.

10. (Canceled).

11. (Currently Amended) The safety bus system of claim ~~10~~1, wherein the ~~at least one actuator is~~actuators comprise electromechanical, electromagnetic, piezoelectric, pneumatic, or hydraulic actuators.

12. (Original) The safety bus system of claim 1, wherein the at least one bus line is electrical, optical, or radio-controlled.

13. (Original) The safety bus system of claim 1, wherein the at least one bus line includes at least one signal line.

14. (Currently Amended) A tabletting machine comprising ~~a safety bus system according to claim 1;~~

a plurality of first bus-capable modules each being connected to at least one sensor and at least one actuator, said sensor configured to sense operational characteristics of a respective

machine component in the tableting machine and said actuator configured to actuate said  
respective machine component;

at least one second bus-capable module connected to at least one safety function;

at least one bus controller configured to control the respective machine components via  
the corresponding first bus-capable modules; and

at least one bus line interconnecting the first and second bus-capable modules and the at  
least one bus controller.

wherein when the safety function is selected, the bus-controller variably controls the  
respective machine components based on the sensed operational characteristics and a type of the  
safety function such that a number of various flexible safety concepts are applied the tableting  
machine.